

## SAN JUAN RIVER BASIN

## 09379050 LUKACHUKAI CREEK NEAR LUKACHUKAI, AZ

**LOCATION**--Lat 36°28'39", long 109°20'58" (unsurveyed), Apache County, Hydrologic Unit 14080204, in Navajo Indian Reservation, on left bank 8 mi northwest of Lukachukai, AZ.

**DRAINAGE AREA**--Unknown.

**PERIOD OF RECORD**--Nov. 1999 to current year.

**GAGE**--Water-stage recorder. Elevation of gage is 5,750 ft above sea level, from topographic map.

**REMARKS**--Records poor. Many small diversions upstream for irrigation and livestock.

**EXTREMES FOR PERIOD OF RECORD**--Maximum discharge, 4,000 ft<sup>3</sup>/s Sept. 10, 2002, at 1345, gage height, 8.17 ft, from an extension of the rating curve. Minimum daily discharge, no flow for many days.

**EXTREMES FOR CURRENT YEAR**--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug. 7 .....	2145	*151	*3.29

Minimum daily discharge, no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.1	e2.5	4.3	7.5	6.5	3.2	18	0.01	<0.01	7.6	0.01
2	0.14	0.54	e2.5	3.1	4.1	5.5	4.2	20	0.01	<0.01	1.8	0.01
3	0.02	0.76	e2.2	4.6	4.3	6.8	4.4	22	0.02	<0.01	0.00	0.03
4	0.02	1.5	e2.8	7.6	4.0	4.9	6.6	22	0.01	<0.01	3.6	0.01
5	0.02	1.4	e2.2	3.7	4.6	6.6	6.4	23	0.01	<0.01	7.0	0.01
6	0.02	0.90	e2.3	1.6	5.5	6.4	7.2	23	0.01	<0.01	3.8	0.76
7	0.02	0.77	e2.3	0.29	7.0	6.1	8.9	21	0.01	<0.01	14	0.51
8	0.02	0.95	e2.6	4.2	6.6	5.3	12	17	<0.01	<0.01	e10	3.9
9	0.02	12	e2.6	4.9	2.8	5.1	18	18	<0.01	<0.01	e1.0	5.9
10	0.02	5.6	e3.3	5.8	3.6	5.4	21	20	<0.01	<0.01	e0.60	e2.9
11	0.02	2.4	e3.3	8.0	8.1	5.3	20	18	<0.01	<0.01	0.99	e1.3
12	0.02	3.5	e3.6	6.6	57	5.5	17	14	<0.01	<0.01	1.7	e0.50
13	0.02	12	e3.6	e5.6	31	6.2	20	13	<0.01	<0.01	1.6	e0.26
14	0.02	5.0	e3.4	e4.5	17	6.1	42	13	<0.01	<0.01	6.9	e0.10
15	0.02	5.0	e3.8	3.4	12	3.2	62	11	<0.01	<0.01	0.25	e0.05
16	0.02	4.4	e4.3	3.6	35	2.9	56	9.6	<0.01	0.01	6.2	e0.01
17	0.04	3.7	e4.2	3.6	13	3.5	61	9.1	<0.01	0.00	0.08	e0.01
18	0.05	3.1	e4.7	3.4	16	3.8	45	8.9	<0.01	0.01	0.01	e0.01
19	0.05	2.7	e4.3	3.4	29	3.6	43	7.9	<0.01	0.00	0.01	e0.01
20	0.04	4.6	e4.0	3.7	15	6.2	33	7.3	<0.01	0.00	0.01	e0.01
21	0.04	35	e3.9	5.3	10	3.9	29	6.9	<0.01	0.01	0.01	0.04
22	0.05	18	e4.0	4.4	10	2.4	25	4.8	<0.01	0.00	0.01	0.83
23	0.20	11	e4.4	3.6	10	3.9	26	1.6	<0.01	0.01	0.01	1.2
24	0.14	7.2	e6.5	2.9	8.8	1.7	41	1.9	<0.01	0.62	0.01	0.10
25	0.19	6.1	e7.4	3.2	7.9	4.7	36	0.43	<0.01	2.0	0.01	0.02
26	0.25	e5.7	e7.4	4.1	7.4	8.6	36	0.07	<0.01	0.00	0.01	0.01
27	0.73	5.3	e8.1	4.5	7.1	5.5	31	<0.01	<0.01	0.00	0.01	0.01
28	13	e4.1	e13	4.4	5.8	6.2	22	0.14	<0.01	0.00	0.01	e0.61
29	14	e3.0	26	2.9	---	7.2	20	0.05	<0.01	0.00	0.01	e0.04
30	3.1	e2.7	7.8	5.3	---	6.6	19	<0.01	<0.01	0.00	0.01	e0.01
31	2.6	---	5.9	7.9	---	3.8	---	<0.01	---	8.6	0.01	---
TOTAL	37.00	170.02	158.9	134.39	350.1	159.4	775.9	331.72	0.31	11.41	67.26	19.17
MEAN	1.19	5.67	5.13	4.34	12.5	5.14	25.9	10.7	0.01	0.37	2.17	0.64
MAX	14	35	26	8.0	57	8.6	62	23	0.02	8.6	14	5.9
MIN	0.02	0.54	2.2	0.29	2.8	1.7	3.2	0.01	0.01	0.00	0.00	0.01
MED	0.04	3.9	3.9	4.2	8.0	5.4	22	9.6	0.01	0.01	0.08	0.04
AC-FT	73	337	315	267	694	316	1540	658	0.6	23	133	38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

(WY)	MEAN	3.39	1.89	1.44	1.86	3.92	4.06	10.5	2.59	0.12	0.88	4.14	2.74
2004	3.32	5.67	5.13	4.34	12.5	6.10	25.9	10.7	0.62	2.50	8.84	6.87	
2005	1.19	5.67	5.13	4.34	12.5	6.10	25.9	10.7	0.62	2.50	8.84	6.87	
2000	0.02	0.05	0.08	0.79	1.47	1.01	0.38	0.03	0.01	0.01	0.27	0.02	
2001	0.02	0.05	0.08	0.79	1.47	1.01	0.38	0.03	0.01	0.01	0.27	0.02	
2002	0.02	0.05	0.08	0.79	1.47	1.01	0.38	0.03	0.01	0.01	0.27	0.02	
2003	0.02	0.05	0.08	0.79	1.47	1.01	0.38	0.03	0.01	0.01	0.27	0.02	
2004	0.02	0.05	0.08	0.79	1.47	1.01	0.38	0.03	0.01	0.01	0.27	0.02	
2005	0.02	0.05	0.08	0.79	1.47	1.01	0.38	0.03	0.01	0.01	0.27	0.02	

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 2000 - 2005

ANNUAL TOTAL	1070.37	2215.58	
ANNUAL MEAN	2.92	6.07	3.02
HIGHEST ANNUAL MEAN			6.07
LOWEST ANNUAL MEAN			0.89
HIGHEST DAILY MEAN	123	Sep 29	142
LOWEST DAILY MEAN	0.01	May 12	0.00
ANNUAL SEVEN-DAY MINIMUM	0.01	May 12	0.00
ANNUAL RUNOFF (AC-FT)	2120		2190
10 PERCENT EXCEEDS	7.3	18	7.2
50 PERCENT EXCEEDS	0.75	3.2	0.60
90 PERCENT EXCEEDS	0.01	0.01	0.01

e Estimated

< Actual value is known to be less than the value shown